

APPENDIX IV

DISTINGUISHING CORN FROM ALFALFA
USING MULTISPECTRAL DATA

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Previous multispectral studies have shown that alfalfa is more reflective than corn in the near infrared region. This finding is confirmed in Fig. 1 of Appendix IV. Crop temperature studies have indicated that alfalfa tends to be several degrees cooler than corn due to its higher evapotranspiration capacity. We felt that it should be possible to construct a three-band composite image which unmistakably separates the two crops. One combination which achieves the desired effect is that of channels 1, 8 and 11, representing the visible, near infrared and thermal regions (Fig. 1).

APPENDIX IV

DISTINGUISHING CORN FROM ALFALFA
USING MULTISPECTRAL DATA

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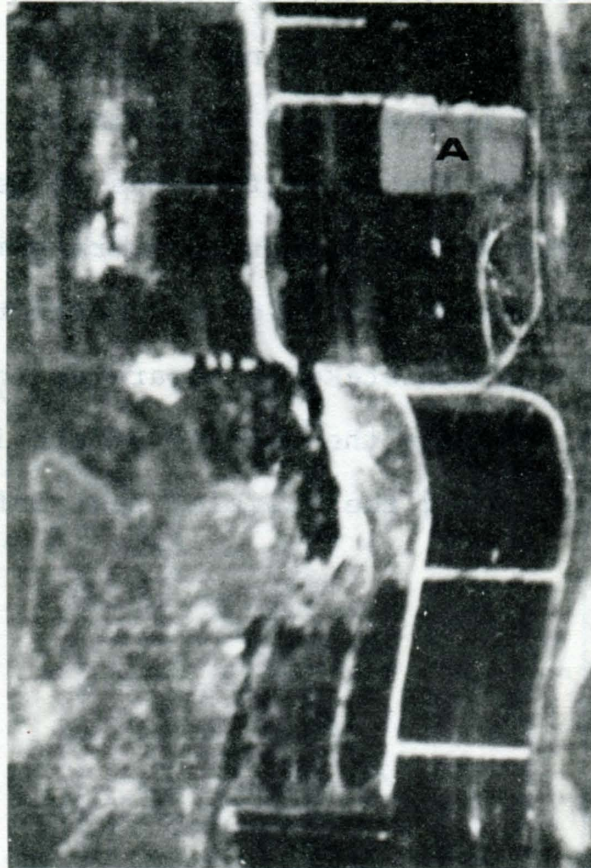


Fig. 1. Three channel color composite of the Sandhills Agricultural Laboratory for the August 30, 1979 data. Color assignments were Blue--Channel 11, Green--Channel 1, and Red--Channel 8. Alfalfa area is labeled A.